AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-14. (canceled)

15. (new) An isolated Alcohol Dehydrogenase 7 (ADH7) nucleic acid sequence for diagnosing Parkinson's disease consisting of one or more of SEQ ID NOS: 1-7, wherein said nucleic acid triggers Parkinson's disease in a human and/or passes the disease to a later human generation.

16. (new) The isolated ADH7 nucleic acid sequence for diagnosing Parkinson's disease according to claim 15, further comprising at least 10 consecutive bases from the human wild type ADH7 sequence.

17. (new) The isolated ADH7 nucleic acid sequence for diagnosing Parkinson's disease according to claim 15, further comprising at least 20 consecutive bases from the human wild type ADH7 sequence.

18. (new) A kit for diagnosing Parkinson's disease comprising a nucleic acid according to claim 15 and instructions for diagnosing Parkinson's disease.

19. (new) A kit for diagnosing Parkinson's disease comprising means for detecting a nucleic acid according to claim 15 and instructions for diagnosing Parkinson's disease.

20. (new) A method for diagnosing Parkinson's disease in a patient comprising testing said patient for the presence of one or more of the ADH7 nucleic acid sequences according to claim 15, and wherein the presence of one or more of the ADH7 sequences indicates that the patient has an increased risk of developing Parkinson's disease or establishes the diagnosis of said disease in said patient.

21. (new) The method according to claim 20, wherein said ADH7 sequence is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, and SEQ ID NO: 6.

22. (new) The method according to claim 20, wherein said ADH7 sequence is SEQ ID NO: 2.

23. (new) The method according to claim 20, wherein said ADH7 sequence is SEQ ID NO: 3.

24. (new) An isolated Alcohol Dehydrogenase 7 (ADH7) nucleic acid sequence for diagnosing Parkinson's disease consisting of one or more of SEQ ID NOS: 1-7, wherein said nucleic acid triggers Parkinson's disease in a human and/or passes the disease to a later human generation.

25. (new) The isolated ADH7 nucleic acid sequence for diagnosing Parkinson's disease according to claim 24, wherein the sequence is SEQ ID NO: 6.

26. (new) The isolated ADH7 nucleic acid sequence for diagnosing Parkinson's disease according to claim 25, wherein the sequence is SEQ ID NO: 3.

27. (new) A kit for diagnosing Parkinson's disease comprising a nucleic acid according to claim 24 and instructions for diagnosing Parkinson's disease.

28. (new) A kit for diagnosing Parkinson's disease comprising means for detecting a nucleic acid according to claim 24 and instructions for diagnosing Parkinson's disease.

29. (new) A method for diagnosing Parkinson's disease in a patient comprising testing said patient for the presence of one or more of the ADH7 nucleic acid sequences according to claim

24, and wherein the presence of one or more of the ADH7 sequences indicates that the patient has an increased risk of developing Parkinson's disease or establishes the diagnosis of said disease in said patient.

30. (new) The method according to claim 29, wherein said ADH7 sequence is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, and SEQ ID NO: 6.

31. (new) The method according to claim 29, wherein said ADH7 sequence is SEQ ID NO: 2.

32. (new) The method according to claim 29, wherein said ADH7 sequence is SEQ ID NO: 3.